

Summary of Striving Readers Projects:

Profile of Newark Public Schools' Striving Readers Project and Evaluation

Grantee: Newark Public Schools

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Principal Investigator: Jennifer Hamilton

Setting

Nineteen middle schools participate in the Newark Striving Readers Project. These schools were selected because they 1) were eligible for Title I funding, 2) served a minimum of two grades across grades six through eight, 3) were not already using READ 180, 4) were categorized as “in need of improvement” under No Child Left Behind, and 5) served a minimum of 25 eligible students reading at least two grades below grade level, based on the 2006 New Jersey state assessment. In these schools, 58 percent of students are African American, 41 percent are Hispanic, 88 percent are identified as low-income, and 7 percent are identified as being English Language Learners (ELL).

Intervention Models

Targeted Intervention

Classroom Model as Planned: The READ 180 program, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The Newark Striving Readers project modified READ 180 to include some supplemental instruction aligned with the state assessment. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Daily assessments are provided by the READ 180 Topic Software and the Scholastic Achievement Manager (SAM) software provides feedback to teachers on student assessments. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year.

Professional Development Model as Planned: Teachers who are new to READ 180 are offered an initial three-day training on the model and three additional follow-up seminars during the year, both provided by the model developer. These training modalities comprise about 33 hours of professional development in a year. New teachers also receive visits by a READ 180 coach four times during the school year for in-class technical assistance, as well as ongoing technical assistance from the trainer and the district as needed. In subsequent years, teachers have two days training at the beginning of the school year and one follow-up session. They receive an annual visit by the READ 180 coach, and the ongoing technical assistance on an as-needed basis.

Context for Implementation: The READ 180 program is being implemented in 10 middle schools, as a replacement of the district's regular core language arts curriculum. Both models are being implemented as supplements to the regular English language arts (ELA) curriculum in the schools. Students in grades 6-8 are eligible for READ 180 if they score at least 1 standard deviation below the grade-standardized mean on the reading subtest of the New Jersey state assessment (ASK: Assessment of Skills and Knowledge). Eligible students can receive the interventions for up to three years (grades 6-8). All special education students who are struggling readers are eligible for the interventions. In the first year of the implementation, approximately 700 students were assigned to READ 180 classes in the 10 treatment schools. In the second year of implementation, a new cohort of 6th graders was added. The number of students served in Year 2 of implementation was approximately 600, including new 6th graders and students in grades 7 and 8 who were eligible to continue in READ 180 for a second year. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The whole school intervention combines two professional development programs on literacy instruction from two providers, New Jersey City University (NJCU) and the National Urban Alliance (NUA). NJCU provides the professional development for language arts teachers and literacy coaches, helping teachers guide students in using a variety of strategies for helping students comprehend text, such as graphic organizers, text annotation, note-taking, post-reading reflection, and anticipation guides to model brain-storming. NUA provides the professional development for other content teachers, to help them provide instruction in similar strategies for content lessons, such as graphic organizers, anticipation guides, and word taxonomies.

Professional Development Model as Planned: Prior to their first year of implementing either of the whole school models, teachers are offered initial Summer Institutes lasting either three or four half-days, for training by NUA or NCJU, respectively. Language arts teachers also have three follow-up training sessions with NCJU trainers during the year and NCJU coaches visit each of the 19 schools five times a year, for observation and discussion with teachers. Other content area teachers have two follow-up training sessions with NUA during the year, and NUA coaches visit each school 15 times to observe and work with teachers. District resource teacher coordinators are also available to visit schools to provide technical assistance on the whole school model on an as-needed basis.

Context for Implementation: All teachers of language arts, mathematics, science, social studies, and special education in the 19 participating middle schools are trained on the whole school interventions. All students in the participating schools are taught by teachers who are part of the model. In a single school year, this involves approximately 3,600 students in grades 6-8 across the 19 schools. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Evaluation of the Targeted Interventions

Research Questions:

1. Does READ 180 significantly improve the reading skills of targeted students?
2. Do different types of students benefit from the intervention in different ways?
3. Does READ 180 significantly improve the school attendance of targeted students?

Research Design and Methods: School-wide random assignment was used to assign the 19 participating middle schools to either implement READ 180 or to continue to provide only the regular language arts curriculum. Schools were blocked on four school-level variables prior to randomization: 1) school size, 2) proportion of ELL students, 3) proportion of students with special needs, and 4) AYP status.

The impact of READ 180 on student outcomes will be assessed using multilevel models to account for the nesting of students within schools. Analyses will also be run to disaggregate effects by grade level, gender, ELL, and special education.

Control Condition: Students in schools randomized to the control condition continue to receive instruction in the regular language arts curriculum.

Sample Size: Nineteen schools were randomly assigned--ten to implement READ 180 and nine to the control condition. In the first year of the study, 1,371 students participated in the evaluation, across both treatment conditions. A new cohort of approximately 400 6th grade students was added in the second year of the study, 200 in treatment schools and 200 in control schools. The impact analysis was conducted on a sample of 934 students in grades 6-8 who had been in READ 180 for one year in either the first or the second years of implementation. The sample size for the control group was 838 students in nine middle schools.

Key Measures of Student Reading Outcomes (Source):

Stanford Achievement Test-10 (vocabulary, reading comprehension, and language arts subtests)
(External Test Publisher)

Evaluation of the Whole School Intervention

Research Questions:

1. Does participation in an ongoing literacy professional development program change the instructional practices of middle school teachers?
2. Does participation in an ongoing literacy professional development program affect the instructional practices of some groups of teachers more than others?
3. Do these changes in teacher instructional practices result in improved reading skills of middle school students?

Research Design and Methods: An interrupted time series analysis will be used to compare pre-program student reading proficiency scores with post-program student reading proficiency scores on the New Jersey state proficiency test.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data.

Comparison Group: All schools in the study participate in the whole school intervention. Therefore, there is no comparison group.

Sample Size: Approximately 480 teachers from the 19 participating schools were eligible to participate in the whole school intervention. All students in the 19 schools in each year in the time series will be included in the final evaluation of the whole school intervention. This consists of approximately 3,600 students.

Key Measures of Student Reading Outcomes (Source):
New Jersey State Language Arts assessment (State Test)

Year 2 Evaluation Findings

Evaluation of the Targeted Interventions

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, the majority of teachers participated in the READ 180 professional development activities at either an adequate level (22%) or fully (56%). The level of participation in professional development declined in Year 2 of implementation, with 24% of teachers participating at an adequate level and 8% participating fully.

In terms of fidelity of implementation of the *classroom model*, ratings of the classrooms were based on a combination of administrative data and data from the READ 180 computerized systems. The student assessments were implemented in line with the READ 180 guidelines in nearly all of the classrooms in Years 1 and 2 of the program. In Year 1 (2006-07), students spent an adequate amount of time using the READ 180 instructional software (compared to the program guidelines) in nearly all of the classrooms. In Year 2 (2007-08), this proportion dropped to fewer than 10% of the classrooms.

Impact of the Targeted Interventions on Student Reading Outcomes: For treatment students who had one year of READ 180, there were no significant effects on any of the three subtests of the Stanford Achievement Test. The effect sizes for the three subtests ranged from .05 to .08. Separate analyses were conducted for students in grade 6 and for students with two years opportunity to participate in READ 180 (7th or 8th grade separately and combined). For each subgroup of students, differential effects were examined by sex, race/ethnicity, and special education status. There were no significant impacts overall in any of the subgroups defined by grade and time in READ 180. There were scattered impacts by other student characteristics, with no discernable pattern.

Evaluation of the Whole School Interventions

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, there were no schools where the majority of teachers participated at a high level in the whole schools professional development activities offered by the two developers. In 42% of the schools, between half and three-quarters of the teachers participated in professional development. In Year 2 of implementation, a majority of teachers participated in professional development in a single school, and in another 11% of schools, between half and three-quarters of the teachers participated in professional development.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (reading subtest of the New Jersey Assessment of Skills and Knowledge (NJ-ASK)).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- The reading test used as an outcome measure (SAT-10) assesses language arts, comprehension, and vocabulary, and was developed by an external test publisher. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students, or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- All schools were able to participate in follow-up data collection. Within schools, few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. Despite random assignment and low attrition, statistically significant differences in eligibility for free and reduced priced lunch were noted. The effects of this difference are mitigated by the inclusion of this measure in the statistical models estimating the impact of the program.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools. A pre-study measure of reading achievement is included in the models to increase the precision of the impact estimates.

Weaknesses

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .15 on the standardized test (SAT 10) for grades 6-8.¹ Because Newark plans to offer the intervention to new groups of students for a total of four school years, future reports will have larger sample sizes of students and will be able to detect somewhat smaller impacts. However, because the Newark evaluation conducted random assignment at the student level, the additional gains in precision will be minimal. In addition, future reports will be able to examine the impact on a student remaining in the targeted intervention for two or three years, which one might hypothesize would be larger than the impact of one year of the intervention.

¹ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.